

Today's Topics:

Aviation NAVAIDS (long)
ICOM handheld batteries question
Info on KENWOOD TR-2600 A needed!!!
interested in opinions
PL259 connector assembly
Radar
Third Party Traffic, MM net and BARF get letters from FCC
Wondering about 455 kHz (2 msgs)

Date: 28 Oct 89 00:24:08 GMT

From: umigw!mthvax.cs.miami.edu!wb8foz@handies.ucar.edu (David Leshner)

Subject: Aviation NAVAIDS (long)

The ILS does use one VHF frequency, but the glide slope is at 300~ mhz. Microwave Landing System (MLS) is coming Real Soon

Now (i.e. DON'T hold your breath)

The marker beacons are separate low power transmitters used to mark specific
points along the ILS approach.

The markers are on 75mhz, with different tone modulations for the outer, middle and inner markers. Look for a Yagi pointing straight up.

I think the description on VOR missed the key point. By send a ref. and a delay/degree signal, VOR tells you the bearing of the STATION to your plane, with NO relation to the DIRECTION you are headed. Thus your section map has the rose on it, and you can extend the line.

On the other hand, ADF tell you the radial relative to YOUR attitude. If you are bouncing everywhich way, so will the ADF.

DME does in fact actively interogate a VOR/TAC station and count onepotato, twopotato to figure out how far away the station is. The station has a specified, fixed, delay time from RX to TX. The TAC part means there is a co-located Tactical navigation station. TAC is ~UHF VOR, but with DME. I guess the Jr. Birdmen let us folks use the DME part.

Now GPS/Navstar, that's neat.....

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A host is a host & from coast to coast...wb8foz@mthvax.cs.miami.edu
no one will talk to a host that's close.....(305) 255-RTFM
Unless the host (that isn't close).....pob 570-335

is busy, hung or dead.....33257-0335

Date: 27 Oct 89 22:18:00 GMT
From: tank!ux1.cso.uiuc.edu!ux1.cso.uiuc.edu!phil@handies.ucar.edu
Subject: ICOM handheld batteries question

> My brother just bought one of the newer ICOM handheld units with the
> battery pack that slips on the bottom of the radio, (sorry, don't
> remember the Model No.). ICOM sells about six different battery packs
> for various combinations of power output and operating time.
> The standard pack that comes with the radio has an output voltage of
> 13.8 V and is spec'd to generate 7 Watts output from the transmitter.
> My question is; what type battery technology are they using in these
> packs? This standard pack doesn't seem large enough to accommodate a
> sufficient number of NI-CAD type cells to yield 13.8 Volts, (unless
> they are very small ones). How about rechargeable Lithium cells? This
> type of battery has a much higher power density than NI-CAD. Anyone
> know the details?

The BP-70 is really a 13.2 V pack and is supplied with the IC-2GAT, IC-4GAT,
and (I believe) IC-32AT dualbander HT. It's rating is a mere 270mah, the
same as the BP-3. However with the 1.8 amp current draw from the IC-2GAT
at full 7 watts, this battery is going run down very fast.

As someone on the net said once before: "Welcome to the 7 watt 7 minute pack".

W&W Associates, and maybe also Periphex, makes 1200mah packs with 9.6v (less
power and less current drawn by the HT) and 13.2v (for full power). Icom's
own BP-7 has 13.2v at (I think) 450mah, or BP-8 at 8.4v and 800mah. You should
also consider the BP-4 alkaline pack. You can put 6 nicads (for 7.2v up to
600mah) or 6 AA alkaline's (for my estimate of 2000mah) of 9 thru 6 volts
(note that in the latter part of alkaline life, high power won't work).

--Phil Howard, KA9WGN--
<phil@ux1.cso.uiuc.edu>

Date: 27 Oct 89 16:49:50 GMT
From: bbn.com!clements@bbn.com (Bob Clements)
Subject: Info on KENWOOD TR-2600 A needed!!!

Oh, good grief. Why do people have to be so reflexively abrasive?

In article <5148@cps3xx.UUCP> hendrick@frith.UUCP (Kenneth J. Hendrickson) writes:
>In article <6866@viscous.sco.COM> stevebe@sco.COM (Steve Beecher) writes:

>> I have a Kenwood TR-2600 A that I have a couple of questions about.
>>First of all, I was wondering how to use the Telephone Autopatch system
>>for business and/or personal use, i.e. extra licences needed, who I need
>
><Flame thrower on>
> [flames deleted]
><Flame thrower off>
>

Look: Mr. Beecher clearly had the idea that he needed other licenses.
He was asking for information. Why did this provoke such anger in
Mr. Hendrickson?

[After more flames,]
> [...] If you need to use radio for your business, get a
>GMRS license, or a license for some other business band, or a cellular
>phone.

This is the kernel of the answer that was sought, but without
enough information to help much.

To Mr. Beecher:

The transceiver which you have is only legal to use on the ham
bands. It isn't possible with any reasonable amount of effort
to do what you want with it. For one thing, it isn't type
accepted for any other service. And the Amateur Service is not
allowed to perform the functions you are asking for, i.e.,
business communications.

Please don't be put off by the response that you received to your
question. There are reasonable and unreasonable people in ham
radio, just as in Usenet and in the rest of the world. You might
decide that ham radio is an interesting hobby, and you would be
welcomed by most of us. But it won't solve your immediate need.
GMRS, a higher-class citizen's band service, may solve your
problem, but I don't have the details on how to get involved with
it. I really suspect that a cellular phone, now that there is
some competition and prices are coming down, may be the right
answer for you.

Bob Clements, k1BC, clements@bbn.com

Date: 27 Oct 89 15:40:46 GMT
From: sparkyfs!aai2!jeffr@rutgers.edu (Jeff Rininger)
Subject: interested in opinions

>Does anyone have any experience with ten-tec trancivers in general, or
>with this model?

I own a Power-mite, Argo 505, Argo 509, Argo 515 and Century 22,
and have operated a Paragon for extended periods of time.

They are all excellent rigs; I would only consider another brand
if TT did not have a rig in the frequency range I wanted.
When they come out with their synthesized QRP HF rig, I'm going
to buy one (around \$900), even though I obviously do not need
another HF QRP rig. I understand that their 2-meter HT is somewhat
of a loser (I haven't heard why), but if I ever see one at a hamfest,
I'll buy it anyway.

>I am familiar with the japanese lines, but not with ten-tec. I understand
>they have a following. Why?

My reasons:

- o They are well-built and easy to work on. (For example, the Argos use plug-in boards and have _lots_ of space inside.)
 - o They perform well (excellent CW characteristics, great audio on SSB) under home-station and adverse portable use.
 - o I don't care for gizmo-laden Japanese radios; TT radios are simple and have uncluttered front panels.
 - o The manuals are excellent and contain complete alignment information (*)
 - o Factory support is superb; I have corresponded many times with Al Kahn, chairman of TT. On more than one occasion, the factory has sent me small parts at no charge (example: dial pointer); other times they have sent me parts I needed without pre-payment ("fronted" me the parts, if you will).
- (*) The one exception here is the Century 22 manual; I wrote the factory asking for alignment information, and received a personal reply form the man who designed the '22.

Ten-Tec radios have their quirks (example: PTO changes frequency a few Hz. when you touch the metal part of the tuning dial) which causes some hams to flame them, but for my bucks, they can't be beat.

73,
Jeff - N6MNI


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> Part (2)----->      =====+
> with one hole showing      ^
>                               |
> e) Carefully solder the braid to the EDGE of part (2) | right here,
> all the way around the end of part (2).
>
> f) Screw part (2) into part (1) tightly (use two pairs of pliers).
> Solder center conductor to part (1).
>
> Forget the four little holes altogether!

> Electrical connection depends on metal-to-metal contact of parts
> (1) and (2). I've never had any problems (and I've long been
> eligible for the QCWA!) Connector is trivial to disassemble (if
> you can find the pliers again) and to reuse.
> --Myron, W0PBV.

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I can always reuse my PL-259 connectors. I have been doing as Myron says, and in addition, between e and f, I clip off the excess and smooth it with a file before assembly.

To get it apart, you only have to loosen the screw part and heat to unsolder the center conductor.

Great job with the description Myron!

Jer/ Eberhard, (SLASH), N0FZD | Hewlett-Packard - MS99, 1UP10, 15' East
 CAP SAR Pilot, COMM,INST,CFI-GLIDER | 3404 East Harmony Road (303) 229-2861
 mail: {ihnp4 | hplabs}!hpfc!a!jle | Fort Collins, Colorado 80525-9599

Date: 27 Oct 89 17:24:31 GMT
 From: hercules!sparkyfs!milkfs.itstd.sri.com!gd@apple.com (Greg DesBrisay)
 Subject: Radar

No, the radar that's been referred to in the news recently is a microwave radar for detecting ballistic missiles. Sure would have been nice if it was the woodpecker though!

Greg, AA6B0

Date: 27 Oct 89 16:48:23 GMT
 From: mailrus!sharkey!lopez!flash@ames.arc.nasa.gov (Gary Bourgois)
 Subject: Third Party Traffic, MM net and BARF get letters from FCC

For those who have been following the controversey on 20 meters, here is the latest:

Maritime Mobile net is now permanently on 14.300. The BARF (Better Amateur Radio Federation) NET is now on 14.313, former home of the MM net. BARF are viewed by some as frequency hijackers, as they took the frequency hostage.

BARF contends that the MM net exists as a TELEPHONE TOLL AVOIDANCE NET. They also are very vocal about any commercial use or seeming commercial use of the amateur spectrum. They site the IMRA net on 14.280, where missionaries do church "business" with their staff in other countries, and the BARFers state this is illegal activity.

The vocal BARFERS have caught the ear of the Friendly Candy Company, as we found out last night while monitoring the 14.343 meeting of MM net personel. Apparently several members of the Maritime Mobile net have received personal letters from the FCC, inquiring about Third Party Traffic. FCC is investigating the nature and scope of such traffic. The Net Manager for MM net advised those who received the letters to reply to the communication, but to include a phrase something like "We hope the FCC will not use such a small 'sample' of amateurs to make any determination of policy regarding third party traffic"...

Ham radio has a long history of traffic handling, witness the most recent coverage we have received during our efforts in Hurricaine HUGO and the S.F. Earthquake. In cases like THIS there is no question of the legality of third party traffic, we just get in there and pass it.

The contention apparently revolves around Phone patch traffic by pleasure boaters, some of which involve business traffic, or in any case could be handled as well by the existing Marritime Mobile commercial carriers. Ham radio is not intended to bypass commercial communications networks.

This reporter has been following the situation on 14.313 for quite a long time, has heard both sides of the story, and also monitored the Jammers and hecklers on frequency.

Needless to say, this situation should be a concern of all active amateurs.

One amateur has gone so far as to put his opinions on this matter into printed form, as the "14.313 Net News". His stand is that the tactics used by the BARF boys are wrong. For a copy of his publications, and other info on the 14.313 situation, send an SASE to:

Robert B. Brown, AA4DY
7200 Fifth Avenue North
St Petersburg, Florida

33710

Bob's son, Chris, who is 14, is an MM net controller, and also active in emergency communications.

Having spent 25 years in news reporting for broadcast and print journals, I personally can step back and see both sides of this issue. It is not going to be an easy one to resolve, but the fact that the FCC is now concerned should give pause to all. Apparently they are also concerned about the JAMMING on frequency which is quite malicious. Granted, the BARFers tend to be controvercial enough to incite the hecklers, but such behavior can not be justified under ANY circumstances.

I am not a member of any traffic net, but have passed traffic when asked to. In addition to emergency traffic, friendly greetings etc are not any threat to any commercial carrier. It is when amateurs blatantly solicit phone patch traffic that the activity becomes objectionable. I do not believe this is why the MM net was set up, and I know the net has provided a meeting place and many services to many amateurs over its 22 year history.

Perhaps net members have some comments.

I monitor 14.313 all afternoon and early evening. After 10pm EST, this operator can be reached on 3950khz. You may also write me at the lopez UUCP site, at the address in my sig.

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| Gary Bourgois, ...rutgers!sharkey!lopez!flash (flash@lopez.UUCP) |  
|      Nationwide Amateur Radio NIGHTLY after 0200z on 3950 KHz      |  
-----[ WB8EOH = The Eccentric Old Hippie ]-----
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Date: 27 Oct 89 14:03:18 GMT
From: att!cbnewsc!parnass@uchvax.Berkeley.EDU (Bob Parnass, AJ9S)
Subject: Wondering about 455 kHz

In article <6919.25471CB4@stjhmc.fidonet.org>,
Jim.Grubs@f1.n234.z1.fidonet.org (Jim Grubs) writes:

- > > From: jpb@ATHENA.MIT.EDU
- > > Does anyone out there know how 455 kHz got to be such a popular IF ?
- > > Why 455, (as opposed to 450 or 500, e.g.)?
- > So broadcast band images would not fall inside the band.

> fall inside the band.

Another good property of a 455 kHz IF is that no two AM broadcast band stations beating together will generate a sum or difference of 455 kHz, which would interfere with receivers en masse.

When a certain ham repeater and VHF paging station both in Joliet (IL) transmit at the same time, the difference in their frequencies is 10.7 MHz. This wipes out most Regency scanners in the Joliet area.

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Bob Parnass, AJ9S - AT&T Bell Laboratories - att!ihuxz!parnass (312)979-5414

Date: 27 Oct 89 18:42:00 GMT
From: silver!commgrp@iuvox.cs.indiana.edu
Subject: Wondering about 455 kHz

>>> Why 455, (as opposed to 450 or 500, e.g.)?
>>So broadcast band images would not fall inside the band.

>Let's see now. If the LO is above the frequency to be received, and
>we are listening to 540 kHz, the LO must be at $540 + 455 = 995$ kHz.
>Therefore the image to be worried about is $995 + 455 = 1450$ kHz.
>That's in the BC band. If the LO is below the frequency to be
>received, and we are listening to 1600 kHz, the LO must be at $1600 - 455$
>= 1145 kHz. Therefore the image to be worried about is $1145 - 455 =$
>690 kHz.

>It seems to me that for quite a significant range of frequencies, the
>image _will_ fall inside the AM BC band. I doubt that's the reason
that
>455 was chosen.

>Kenneth J. Hendrickson N8DGN

AM BC receiver local oscillators are almost always above the received frequency. I attended high school when every kid had an AM transistor radio surgically attached to one ear. It was a lot of fun to use my local oscillator to jam nearby radios tuned above 990 kHz (oops, I mean kc).

 |_ | >*>*> |_ |
 :-) :-(

Frank W9MKV reid@gold.bacs.indiana.edu

ps - I don't know why they chose 455 either.

End of INFO-HAMS Digest V89 Issue #817
